Staphylococcal (Toxic Shock Syndrome)

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What is staphylococcal toxic shock syndrome?

Staphylococcal toxic shock syndrome (TSS) is an illness caused by bacteria called *Staphylococcus aureus*. The illness became widely recognized in 1980 among women who used tampons. Since then, the cases associated with menstruation have decreased to about 55% of all cases, while other risk factors have been found such as use of diaphragms and vaginal contraceptive sponges and infection following childbirth, abortion, and surgery.

Who gets staphylococcal toxic shock syndrome?

Those at highest risk of infection include 1) menstruating women using tampons or other inserted devices, 2) persons (male and female) with *S. aureus* infection of some other body site, 3) women using diaphragms or contraceptive sponges.

Where are organisms found?

Staphylococcus aureus can be found anywhere. It is normal for strains of the bacteria to live in the nose and moist body areas in approximately 30% of humans.

How is staphylococcal toxic shock syndrome spread?

Although *S. aureus* is spread from person-to-person, toxic shock syndrome itself is not transmitted from one person to another. TSS is caused when the *S. aureus* bacteria grow on a mucous membrane and produce a toxin. The toxin is what actually causes illness.

What are the symptoms of staphylococcal toxic shock syndrome?

This is a severe acute illness with fever usually 102 degrees or higher with muscle aches, vomiting, and diarrhea. Patients usually have a red sunburn-like rash early on. Then the skin peels, especially on the palms of the hands and soles of the feet about 1 to 2 weeks after onset of illness. Hypotension (low blood pressure), and in severe cases, shock and failure of more than one organ system can occur. Staphylococcal TSS is frequently a life-threatening or fatal disease, but with treatment the case fatality rate is 2% to 4%.

How soon after exposure do symptoms appear?

The median incubation period, based on cases that occur after surgery, is 2 days.

What is the treatment for staphylococcal toxic shock syndrome?

Treatment is largely supportive and depends on the severity of illness and complications. Antibiotics are used to stop the growth of toxin-producing *S. aureus* and to reduce the risk of a repeat episode.

How can staphylococcal toxic shock syndrome be prevented?

Most menstrual TSS can be prevented by avoiding the use of highly absorbent vaginal tampons. The risk may be reduced by using tampons intermittently during each menstrual cycle and by using less-absorbent tampons. Users of diaphragms and contraceptive sponges should follow instructions which advise these not be left in place for more than 30 hours.

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